

THOMAS WALLNER

EDUCATION

2001 - 2004 **Doctoral Studies of Technical Science at Graz University of Technology**

- Dissertation: "Development of combustion concepts for a hydrogen powered internal combustion engine"
- Final degree with distinction
- Dissertation awarded by the Association of the Austrian Vehicle Industry

1995 - 2001 **Studies "Mechanical Engineering - Economics" at Graz University of Technology**

- Branch of study: Transportation technology
 - Diploma thesis: "Design of an engine test bench for combustion process development"
- Final degree with distinction

EMPLOYMENT

2004 - **Present** Authorized contact person / Team leader of Graz University of Technology for European Integrated Project "HyICE"

2001 - 2004 Scientific assistant at the Institute of Internal Combustion Engines and Thermodynamics at Graz University of Technology

- Department: Engine Research/Combustion Process

1998 and 1999 Internship at AVL List GmbH
Department for Flow and Port Development

WORK RELATED EXPERIENCE

2001 - 2002 Technician in private motorcycle racing team (spare time)

Winter term 2000/01 Tutor for Thermodynamics at the Institute of Internal Combustion Engines and Thermodynamics at Graz University of Technology

PATENTS AND PUBLICATIONS

Wimmer, A.; **Wallner, T.**; Ringler, J.; Gerbig, F.: "*H₂-Direct Injection – A Highly Promising Combustion Concept.*" SAE-World Congress. Detroit. USA. 2005.

Wallner, T.; Wimmer, A.; Gerbig, F.; Fickel, H.: "*The hydrogen combustion engine – a basic concept study.*" Symposium "Gas vehicles – The Suitable Answer to the CO₂-Challenge of the Future?" 2004.

Eichlseder, H.; **Wallner, T.**; Gerbig, F.; Fickel, H.: "*Mixture formation and combustion concepts for hydrogen internal combustion engines*" Symposium "Future Development Trends for Spark Ignition Engines." 2004.

Ringler, J.; Gerbig, F.; Eichlseder, H.; **Wallner, T.**: "*Insights into the Development of a Hydrogen Combustion Process with Internal Mixture Formation.*" 6th International Symposium on Internal Combustion Diagnostics. 2004.

Wallner, T.; Eichlseder, H.; Freymann, R.; Ringler, J.: "*The Potential of Hydrogen Internal Combustion Engines in a Future Mobility Scenario.*" Symposium "The Urban Ecological Transport: The Gaseous Fuel Option." 2003.

Eichlseder, H.; **Wallner, T.**; Freymann, R.; Ringler, J.: "*The Potential of Hydrogen Internal Combustion Engines in a Future Mobility Scenario.*" International Future Transportation Technology Conference. SAE-Paper No. 2003-01-2267. 2003.

Ringler, J.; Strobl, W.; Schüers, A.; Eichlseder, H.; Wimmer, A.; **Wallner, T.**: "*Method for operating a combustion engine.*" Patent application. 2003.

Eichlseder, H.; Pischinger, R.; **Wallner, T.**; Wimmer, A.; Pirker, G.; Ringler, J.: "*Thermodynamic examination of SI-engine combustion concepts and fuels as well as their potential.*" Symposium "Future Development Trends for Spark Ignition Engines." 2002.